Ibm Integration Bus V10 Application Development I

This IBM® Redbooks® publication gives an overview of Cloud solutions, followed by detailed information and usage scenarios for IBM CloudBurst® in a System x® environment. Cloud computing can be defined as a style of computing in which dynamically scalable resources, such as CPU, storage, or bandwidth, are provided as a service over the Internet. Cloud computing represents a massively scalable, self-service delivery model where processing, storage, networking, and applications can be accessed as services over the Internet. Enterprises can adopt cloud models to improve employee productivity, deploy new products and services faster and reduce operating costs—starting with workloads, such as development and test, virtual desktop, collaboration, and analytics. IBM provides a scalable variety of cloud solutions to meet these needs. This IBM Redbooks publication helps you to tailor an IBM CloudBurst installation on System x to meet virtualized computing requirements in a private cloud environment. This book is intended for IT support personnel who are responsible for customizing IBM CloudBurst to meet business cloud computing objectives. Along with servers and networking infrastructure, networked storage is one of the fundamental components of a modern data center. Because storage networking has evolved over the past two decades, the industry has settled on the basic storage networking technologies. These technologies are Fibre Channel (FC) storage area networks (SANs), Internet Small Computer System Interface (iSCSI)-based Ethernet attachment, and Ethernet-based network-attached storage (NAS). Today, lossless, low-latency, high-speed FC SANs are viewed as the high-performance option for networked

storage. iSCSI and NAS are viewed as lower cost, lower performance technologies. The advent of the 100 Gbps Ethernet and Data Center Bridging (DCB) standards for lossless Ethernet give Ethernet technology many of the desirable characteristics that make FC the preferred storage networking technology. These characteristics include comparable speed, low latency, and lossless behavior. Coupled with an ongoing industry drive toward better asset utilization and lower total cost of ownership, these advances open the door for organizations to consider consolidating and converging their networked storage infrastructures with their Ethernet data networks. Fibre Channel over Ethernet (FCoE) is one approach to this convergence, but 10-Gbps-enabled iSCSI also offers compelling options for many organizations with the hope that their performance can now rival that of FC. This IBM® Redbooks® publication is written for experienced systems, storage, and network administrators who want to integrate the IBM System Networking and Storage technology successfully into new and existing networks. This book provides an overview of today's options for storage networking convergence. It reviews the technology background for each of these options and then examines detailed scenarios for them by using IBM and IBM Business Partner convergence products.

This much-anticipated revision, written by the ultimate group of top security experts in the world, features 40 percent new content on how to find security holes in any operating system or application New material addresses the many new exploitation techniques that have been discovered since the first edition, including attacking "unbreakable" software packages such as McAfee's Entercept, Mac OS X, XP, Office 2003, and Vista Also features the first-ever published information on exploiting Cisco's IOS, with content that has never before been explored The companion Web site

features downloadable code files

This book is based on a series of conferences on Wireless Communications, Networking and Applications that have been held on December 27-28, 2014 in Shenzhen, China. The meetings themselves were a response to technological developments in the areas of wireless communications, networking and applications and facilitate researchers, engineers and students to share the latest research results and the advanced research methods of the field. The broad variety of disciplines involved in this research and the differences in approaching the basic problems are probably typical of a developing field of interdisciplinary research. However, some main areas of research and development in the emerging areas of wireless communication technology can now be identified. The contributions to this book are mainly selected from the papers of the conference on wireless communications, networking and applications and reflect the main areas of interest: Section 1 - Emerging Topics in Wireless and Mobile Computing and Communications; Section 2 - Internet of Things and Long Term Evolution Engineering; Section 3 - Resource Allocation and Interference Management; Section 4 - Communication Architecture, Algorithms, Modeling and Evaluation; Section 5 - Security, Privacy, and Trust; and Section 6 - Routing, Position Management and Network Topologies.

Shows how to construct a power supply, microprocessor, peripheral devices and a CRT terminal and explains the design considerations of each project

This IBM® Redbooks® publication is focused on melding industry preferred practices with the unique needs of the IBM i community and providing a holistic view of modernization. This book covers key trends for application structure, user interface, data access, and the database. Modernization is a broad term when applied to applications. It is more than a

single event. It is a sequence of actions. But even more, it is a process of rethinking how to approach the creation and maintenance of applications. There are tangible deliveries when it comes to modernization, the most notable being a modern user interface (UI), such as a web browser or being able to access applications from a mobile device. The UI, however, is only the beginning. There are many more aspects to modernization. Using modern tools and methodologies can significantly improve productivity and reduce long-term cost while positioning applications for the next decade. It is time to put the past away. Tools and methodologies have undergone significant transformation, improving functionality, usability, and productivity. This is true of the plethora of IBM tools and the wealth of tools available from many Independent Solution Providers (ISVs). This publication is the result of work that was done by IBM, industry experts, and by representatives from many of the ISV Tool Providers. Some of their tools are referenced in the book. In addition to reviewing technologies based on context, there is an explanation of why modernization is important and a description of the business benefits of investing in modernization. This critical information is key for line-of-business executives who want to understand the benefits of a modernization project. This book is appropriate for CIOs, architects, developers, and business leaders. Related information Making the Case for Modernization, IBM Systems Magazine

Embedded Systems Design with Platform FPGAs introduces professional engineers and students alike to system development using Platform FPGAs. The focus is on embedded systems but it also serves as a general guide to building custom computing systems. The text describes the fundamental technology in terms of hardware, software, and a set of principles to guide the development of Platform FPGA systems. The goal is to show how to systematically

and creatively apply these principles to the construction of application-specific embedded system architectures. There is a strong focus on using free and open source software to increase productivity. Each chapter is organized into two parts. The white pages describe concepts, principles, and general knowledge. The gray pages provide a technical rendition of the main issues of the chapter and show the concepts applied in practice. This includes step-by-step details for a specific development board and tool chain so that the reader can carry out the same steps on their own. Rather than try to demonstrate the concepts on a broad set of tools and boards, the text uses a single set of tools (Xilinx Platform Studio, Linux, and GNU) throughout and uses a single developer board (Xilinx ML-510) for the examples. Explains how to use the Platform FPGA to meet complex design requirements and improve product performance Presents both fundamental concepts together with pragmatic, step-by-step instructions for building a system on a Platform FPGA Includes detailed case studies, extended real-world examples, and lab exercises

Latest C9530-001 IBM Integration Bus v10.0 Solution Development Exam Questions & AnswersPass Exam

This IBM® Redbooks® publication provides performance tuning tips and best practices for IBM Business Process Manager (IBM BPM) V8.5.5 (all editions) and IBM Business Monitor V8.5.5. These products represent an integrated development and runtime environment based on a key set of service-oriented architecture (SOA) and business process management (BPM) technologies. Such technologies include Service Component Architecture (SCA), Service Data Object (SDO), Business Process Execution Language (BPEL) for web services, and Business Processing Modeling Notation (BPMN). Both IBM Business Process Manager and Business Monitor build on the core capabilities of the IBM WebSphere®

Application Server infrastructure. As a result, Business Process Manager solutions benefit from tuning, configuration, and best practices information for WebSphere Application Server and the corresponding platform Java virtual machines (JVMs). This book targets a wide variety of groups, both within IBM (development, services, technical sales, and others) and customers. For customers who are either considering or are in the early stages of implementing a solution incorporating Business Process Manager and Business Monitor, this document proves a useful reference. The book is useful both in terms of best practices during application development and deployment and as a reference for setup, tuning, and configuration information. This book talks about many issues that can influence performance of each product and can serve as a guide for making rational first choices in terms of configuration and performance settings. Similarly, customers who already implemented a solution with these products can use the information presented here to gain insight into how their overall integrated solution performance can be improved.

This IBM® Redbooks® publication describes how to build production topologies for IBM Business Process Manager Advanced V7.5. It is aimed at IT Architects and IT Specialists who want to understand and implement these topologies. Use this book to select the appropriate production topologies for a given environment, then follow the step-by-step instructions included in this book to build these topologies. Part one introduces IBM Business Process Manager and provides an overview of basic topology components, and Process Server and Process Center. This part also provides an overview of the production topologies that we describe in this book, including a selection criteria for when to select a given topology. Part two provides a series of step-by-step instructions for creating production topology environments

using deployment environment patterns. This includes topologies that incorporate IBM Business Monitor. This part also discusses advanced topology topics.

IBM DB2® for z/OS® is a high-performance database management system (DBMS) with a strong reputation in traditional high-volume transaction workloads that are based on relational technology. IBM WebSphere® Application Server is web application server software that runs on most platforms with a web server and is used to deploy, integrate, execute, and manage Java Platform, Enterprise Edition applications. In this IBM® Redbooks® publication, we describe the application architecture evolution focusing on the value of having DB2 for z/OS as the data server and IBM z/OS® as the platform for traditional and for modern applications. This book provides background technical information about DB2 and WebSphere features and demonstrates their applicability presenting a scenario about configuring WebSphere Version 8.5 on z/OS and type 2 and type 4 connectivity (including the XA transaction support) for accessing a DB2 for z/OS database server taking into account high-availability requirements. We also provide considerations about developing applications, monitoring performance, and documenting issues. DB2 database administrators, WebSphere specialists, and Java application developers will appreciate the holistic approach of this document.

IBM® Cloud Manager with OpenStack for z SystemsTM, V4.2 is an easy-to-use cloud management solution that serves as a control point for cloud managed resources based on the OpenStack Juno distribution. IBM Cloud Manager with OpenStack for z Systems, V4.2 can operate as a cloud management hub that can manage IBM z SystemsTM, IBM Power SystemsTM, and x86 resources from a central point of control. This IBM Redbooks® publication gives a broad

understanding of the architecture for IBM Cloud Manager with OpenStack for z Systems, V4.2, and how it can be implemented and deployed to support cloud services on the z Systems platform. This publication also helps you plan, install, configure, and use IBM Cloud Manager with OpenStack for z Systems, V4.2. It focuses on planning and design of your cloud environment on z Systems, as well as the installation and configuration definitions that are necessary to build and manage cloud resources under IBM z/VM®. This information is useful to IT architects and system administrators who plan for and install IBM Cloud Manage with OpenStack for z Systems. The reader is expected to have a good understanding of IBM z SystemsTM hardware, IBM z/VM, Linux on z Systems, and cloud concepts.

This book explains why AI is unique, what legal and ethical problems it could cause, and how we can address them. It argues that AI is unlike any other previous technology, owing to its ability to take decisions independently and unpredictably. This gives rise to three issues: responsibility--who is liable if AI causes harm; rights--the disputed moral and pragmatic grounds for granting AI legal personality; and the ethics surrounding the decision-making of AI. The book suggests that in order to address these questions we need to develop new institutions and regulations on a cross-industry and international level. Incorporating clear explanations of complex topics, Robot Rules will appeal to a multi-disciplinary audience, from those with an interest in law, politics and philosophy, to computer programming, engineering and neuroscience.

This book presents an introduction to the principles of the fast Fourier transform. This book covers FFTs, frequency domain filtering, and applications to video and audio signal processing. As fields like communications, speech and image processing, and related areas are rapidly developing, the FFT

as one of essential parts in digital signal processing has been widely used. Thus there is a pressing need from instructors and students for a book dealing with the latest FFT topics. This book provides thorough and detailed explanation of important or up-to-date FFTs. It also has adopted modern approaches like MATLAB examples and projects for better understanding of diverse FFTs.

This IBM Redbooks publication describes and demonstrates common, prescriptive scenarios for setting up disaster recovery for common workloads using IBM WebSphere Application Server, IBM DB2, and WebSphere MQ between two IBM PureApplication System racks using the features in PureApplication System V2. The intended audience for this book is pattern developers and operations team members who are setting up production systems using software patterns from IBM that must be highly available or able to recover from a disaster (defined as the complete loss of a data center).

Updated concepts and tools to set up project plans, schedule work, monitor progress-and consistently achieve desired project results.In today's time-based and cost-conscious global business environment, tight project deadlines and stringent expectations are the norm. This classic book provides businesspeople with an excellent introduction to project management, supplying sound, basic information (along with updated tools and techniques) to understand and master the complexities and nuances of project management. Clear and down-to-earth, this step-by-step guide explains how to effectively spearhead every stage of a project-from developing the goals and objectives to managing the project team-and make project management work in any company. This updated second edition includes: * New material on the Project Management Body of Knowledge (PMBOK) * Do's and don'ts of implementing scheduling software* Coverage of

the PMP certification offered by the Project Management Institute* Updated information on developing problem statements and mission statements* Techniques for implementing today's project management technologies in any organization-in any industry.

This IBM® Redbooks® publication gives a broad understanding of IBM IMSTM integration and connectivity solutions to access applications and data stores across your enterprise architecture. As an application developer, architect, systems integrator, or systems programmer, there is important information that is available in this book that pertains to your responsibilities to continue to include the proven performance, data integrity, and workload distribution that is available from IMS in to selected projects that are related to your entire enterprise. This book updates and adds to the information in the following IBM Redbooks publications: IMS e-business Connectors: A Guide to IMS Connectivity, SG24-6514 IMS Connectivity in an On Demand Environment: A Practical Guide to IMS Connectivity, SG24-6794 Powering SOA Solutions with IMS, SG24-7662 IBM IMS Version 12 Technical Overview, SG24-7972 IMS 12: The IMS Catalog, REDP-4812 Rethink Your Mainframe Applications: Reasons and Approaches for Extension, Transformation, and Growth, REDP-4938

The organization pursuing digital transformation must embrace new ways to use and deploy

integration technologies, so they can move quickly in a manner appropriate to the goals of multicloud, decentralization, and microservices. The integration layer must transform to allow organizations to move boldly in building new customer experiences, rather than forcing models for architecture and development that pull away from maximizing the organization's productivity. Many organizations have started embracing agile application techniques, such as microservice architecture, and are now seeing the benefits of that shift. This approach complements and accelerates an enterprise's API strategy. Businesses should also seek to use this approach to modernize their existing integration and messaging infrastructure to achieve more effective ways to manage and operate their integration services in their private or public cloud. This IBM® Redbooks® publication explores the merits of what we refer to as agile integration; a container-based, decentralized, and microservice-aligned approach for integration solutions that meets the demands of agility, scalability, and resilience required by digital transformation. It also discusses how the IBM Cloud Pak for Integration marks a significant leap forward in integration technology by embracing both a cloud-native approach and container technology to achieve the goals of agile integration. The target audiences for this book are cloud integration architects, IT specialists, and application developers.

Throughout the history of the IT industry, integration has been an important part of most projects. Whether it is integration of transactions, data, or processes, each has challenges and associated patterns and antipatterns. In an age of mobile devices, social networks, and cloud services, and big data analytics, integration is more important than ever, but the scope of the challenge for IT projects has changed. Partner APIs, social networks, physical sensors and devices, all of these and more are important sources of capability or insight. It is no longer sufficient to integrate resources under control of the enterprise, because many important resources are in the ecosystem beyond enterprise boundaries. With this as the basic tenet, we address these questions: What are the current integration patterns that help enterprises become and remain competitive? How do you choose when to use which pattern? What is the topology for a "composable business"? And how do you accelerate the process of implementation through intelligent choice of supporting integration middleware? This IBM® Redbooks® publication guides integration practitioners and architects in choosing integration patterns and technologies.

The IBM® System Storage® Solutions Handbook helps you solve your current and future data storage business requirements. It helps you achieve enhanced storage efficiency by design to allow

managed cost, capacity of growth, greater mobility, and stronger control over storage performance and management. It describes the most current IBM storage products, including the IBM SpectrumTM family, IBM FlashSystem®, disk, and tape, as well as virtualized solutions such IBM Storage Cloud. This IBM Redbooks® publication provides overviews and information about the most current IBM System Storage products. It shows how IBM delivers the right mix of products for nearly every aspect of business continuance and business efficiency. IBM storage products can help you store, safeguard, retrieve, and share your data. This book is intended as a reference for basic and comprehensive information about the IBM Storage products portfolio. It provides a starting point for establishing your own enterprise storage environment. This book describes the IBM Storage products as of March, 2016.

Weighing in on the growth of innovative technologies, the adoption of new standards, and the lack of educational development as it relates to current and emerging applications, the third edition of Introduction to Instrumentation and Measurements uses the authors' 40 years of teaching experience to expound on the theory, science, and art of modern instrumentation and measurements (I&M). What's New in This Edition: This edition includes material on modern integrated circuit (IC) and photonic sensors, micro-electro-mechanical (MEM) and nano-electro-

mechanical (NEM) sensors, chemical and radiation sensors, signal conditioning, noise, data interfaces, and basic digital signal processing (DSP), and upgrades every chapter with the latest advancements. It contains new material on the designs of micro-electro-mechanical (MEMS) sensors, adds two new chapters on wireless instrumentation and microsensors, and incorporates extensive biomedical examples and problems. Containing 13 chapters, this third edition: Describes sensor dynamics, signal conditioning, and data display and storage Focuses on means of conditioning the analog outputs of various sensors Considers noise and coherent interference in measurements in depth Covers the traditional topics of DC null methods of measurement and AC null measurements Examines Wheatstone and Kelvin bridges and potentiometers Explores the major AC bridges used to measure inductance, Q, capacitance, and D Presents a survey of sensor mechanisms Includes a description and analysis of sensors based on the giant magnetoresistive effect (GMR) and the anisotropic magnetoresistive (AMR) effect Provides a detailed analysis of mechanical gyroscopes, clinometers, and accelerometers Contains the classic means of measuring electrical quantities Examines digital interfaces in measurement systems Defines digital signal conditioning in instrumentation Addresses solid-state

chemical microsensors and wireless instrumentation Introduces mechanical microsensors (MEMS and NEMS) Details examples of the design of measurement systems Introduction to Instrumentation and Measurements is written with practicing engineers and scientists in mind, and is intended to be used in a classroom course or as a reference. It is assumed that the reader has taken core EE curriculum courses or their equivalents. Using the book and the software provided with it, the reader can build his/her own tester arrangement to investigate key aspects of analog-, digital- and mixed system circuits Plan of attack based on traditional testing, circuit design and circuit manufacture allows the reader to appreciate a testing regime from the point of view of all the participating interests Worked examples based on theoretical bookwork, practical experimentation and simulation exercises teach the reader how to test circuits thoroughly and effectively This IBM® Redbooks® publication provides a technical overview of the features, functions, and enhancements available in IBM i 7.1, including all the Technology Refresh (TR) levels from TR1 to TR7. It provides a summary and brief explanation of the many capabilities and functions in the operating system. It also describes many of the licensed programs and application development tools that are associated with IBM i. The information provided in this book is useful for clients, IBM Business

Partners, and IBM service professionals who are involved with planning, supporting, upgrading, and implementing IBM i 7.1 solutions.

Rootkits and Bootkits will teach you how to understand and counter sophisticated, advanced threats buried deep in a machine's boot process or UEFI firmware. With the aid of numerous case studies and professional research from three of the world's leading security experts, you'll trace malware development over time from rootkits like TDL3 to present-day UEFI implants and examine how they infect a system, persist through reboot, and evade security software. As you inspect and dissect real malware, you'll learn: • How Windows boots—including 32-bit, 64-bit, and UEFI mode—and where to find vulnerabilities • The details of boot process security mechanisms like Secure Boot, including an overview of Virtual Secure Mode (VSM) and Device Guard • Reverse engineering and forensic techniques for analyzing real malware, including bootkits like Rovnix/Carberp, Gapz, TDL4, and the infamous rootkits TDL3 and Festi • How to perform static and dynamic analysis using emulation and tools like Bochs and IDA Pro • How to better understand the delivery stage of threats against BIOS and UEFI firmware in order to create detection capabilities • How to use virtualization tools like VMware Workstation to reverse engineer bootkits and the Intel Chipsec tool to dig into forensic

analysis Cybercrime syndicates and malicious actors will continue to write ever more persistent and covert attacks, but the game is not lost. Explore the cutting edge of malware analysis with Rootkits and Bootkits. Covers boot processes for Windows 32-bit and 64-bit operating systems.

Systems of record (SORs) are engines that generates value for your business. Systems of engagement (SOE) are always evolving and generating new customer-centric experiences and new opportunities to capitalize on the value in the systems of record. The highest value is gained when systems of record and systems of engagement are brought together to deliver insight. Systems of insight (SOI) monitor and analyze what is going on with various behaviors in the systems of engagement and information being stored or transacted in the systems of record. SOIs seek new opportunities, risks, and operational behavior that needs to be reported or have action taken to optimize business outcomes. Systems of insight are at the core of the Digital Experience, which tries to derive insights from the enormous amount of data generated by automated processes and customer interactions. Systems of Insight can also provide the ability to apply analytics and rules to real-time data as it flows within, throughout, and beyond the enterprise (applications, databases, mobile, social, Internet of Things) to gain the wanted insight.

Deriving this insight is a key step toward being able to make the best decisions and take the most appropriate actions. Examples of such actions are to improve the number of satisfied clients, identify clients at risk of leaving and incentivize them to stay loyal, identify patterns of risk or fraudulent behavior and take action to minimize it as early as possible, and detect patterns of behavior in operational systems and transportation that lead to failures, delays, and maintenance and take early action to minimize risks and costs. IBM® Operational Decision Manager is a decision management platform that provides capabilities that support both event-driven insight patterns, and business-rule-driven scenarios. It also can easily be used in combination with other IBM Analytics solutions, as the detailed examples will show. IBM Operational Decision Manager Advanced, along with complementary IBM software offerings that also provide capability for systems of insight, provides a way to deliver the greatest value to your customers and your business. IBM Operational Decision Manager Advanced brings together data from different sources to recognize meaningful trends and patterns. It empowers business users to define, manage, and automate repeatable operational decisions. As a result, organizations can create and shape customer-centric business moments. This IBM Redbooks® publication explains the key concepts of systems of

insight and how to implement a system of insight solution with examples. It is intended for IT architects and professionals who are responsible for implementing a systems of insights solution requiring event-based context pattern detection and deterministic decision services to enhance other analytics solution components with IBM Operational Decision Manager Advanced.

Innovations in hardware architecture, like hyper-threading or multicore processors, mean that parallel computing resources are available for inexpensive desktop computers. In only a few years, many standard software products will be based on concepts of parallel programming implemented on such hardware, and the range of applications will be much broader than that of scientific computing, up to now the main application area for parallel computing. Rauber and Rünger take up these recent developments in processor architecture by giving detailed descriptions of parallel programming techniques that are necessary for developing efficient programs for multicore processors as well as for parallel cluster systems and supercomputers. Their book is structured in three main parts, covering all areas of parallel computing: the architecture of parallel systems, parallel programming models and environments, and the implementation of efficient application algorithms. The emphasis lies on parallel programming techniques needed for different

architectures. For this second edition, all chapters have been carefully revised. The chapter on architecture of parallel systems has been updated considerably, with a greater emphasis on the architecture of multicore systems and adding new material on the latest developments in computer architecture. Lastly, a completely new chapter on general-purpose GPUs and the corresponding programming techniques has been added. The main goal of the book is to present parallel programming techniques that can be used in many situations for a broad range of application areas and which enable the reader to develop correct and efficient parallel programs. Many examples and exercises are provided to show how to apply the techniques. The book can be used as both a textbook for students and a reference book for professionals. The material presented has been used for courses in parallel programming at different universities for many years. IBM® ILOG® Visualization products allow you to create the most advanced graphical user interfaces for line-of-business applications, help users understand their data better, and react to a changing market faster and smarter. This IBM Redbooks® publication describes two IBM Visualization products: IBM ILOG JViews Enterprise and IBM ILOG Elixir® Enterprise. It provides detailed samples and scenarios covering how these products can be integrated with other IBM software such as IBM

WebSphere® REST Technology, IBM Cognos®, IBM Mashup Center, IBM WebSphere Business Monitor and Business Space, and IBM WebSphere Dashboard Framework to provide Web 2.0 and Ajax visualization solutions. This book is targeted to application interface developers and programmers who develop highly advanced graphical user interfaces using IBM ILOG Visualization products with IBM Cognos, IBM Mashup Center, IBM WebSphere Business Monitor and Business Space, and IBM WebSphere Dashboard Framework.
In this IBM® Redbooks® publication we describe how to build an advanced business application from end to end. We use a fictional scenario to define the application, document the deployment methodology, and confirm the roles needed to support its development and deployment. Through step-by-step instructions you learn how to: - Define the project lifecycle using IBM Solution for Collaborative Lifecycle Management - Build a logical and physical data model in IBM InfoSphere® Data Architect - Confirm business rules and business events using IBM WebSphere® Operational Decision Management - Map a business process and mediation using IBM Business Process Manager - Use IBM Cognos® Business Intelligence to develop business insight In addition, we articulate a testing strategy using IBM Rational® Quality Manager and deployment options using IBM Workload Deployer.

Taken together, this book provides comprehensive guidance for building and testing a solution using core IBM Rational, Information Management, WebSphere, Cognos and Business Process Management software. It seeks to demystify the notion that developing and deploying advanced solutions is taxing. This book will appeal to IT architects and specialists who seek straightforward guidance on how to build comprehensive solutions. They will be able to adapt these materials to kick-start their own end-to-end projects.

The event-centric hybrid cloud integration revolves around applications running based on events or messages. The new event-centric approach to hybrid cloud aims to simplify the task of managing these messages while increasing the overall reliability of the system. Event-centric applications work well in the cloud due to the varying intensity and frequency of events. These fluctuations fit well into a cloud infrastructure that can dynamically scale to fit those needs. An event-centric approach cuts down on communication overhead for an application, thus helping to speed up the development process. IBM® Hybrid Integration Services is a set of hybrid cloud capabilities in IBM Bluemix® that allows businesses to create hybrid clouds by connecting their Bluemix environment to on-premises systems at the application programming interface (API), data, or event level. In November 2015, the IBM

International Technical Support Organization (ITSO) IBM Redbooks® team published a Redbooks publication that covers hybrid cloud scenarios with Bluemix for API and data integrations, Hybrid Cloud Data and API Integration: Integrate Your Enterprise and Cloud with Bluemix Integration Services, SG24-8277, and can be found at the following website: http://www.redbooks.ibm.com/Redbooks.nsf/RedbookAbstracts/sg248277.html?Open Hybrid Cloud Event Integration: Integrate Your Enterprise and Cloud with Bluemix Integration Services, SG24-8281 is a companion book to SG24-8277 and focuses on event-centric hybrid cloud integrations with Bluemix.

This IBM® Redbooks® publication describes the IBM MQ Appliance M2000, an application connectivity option that combines secure, reliable IBM MQ messaging with the simplicity and low overall costs of a hardware appliance. This book presents underlying concepts and practical advice for integrating the IBM MQ Appliance M2000 into an IBM MQ infrastructure. Therefore, it is aimed at enterprises that are considering a possible first use of IBM MQ and the IBM MQ Appliance M2000 and those that already identified the appliance as a logical addition to their messaging environment. Details about new functionality and changes in approaches to application messaging are also described. The authors' goal is to help readers make

informed design and implementation decisions so that the users can successfully integrate the IBM MQ Appliance M2000 into their environments. A broad understanding of enterprise messaging is required to fully comprehend the details that are provided in this book. Readers are assumed to have at least some familiarity and experience with complimentary IBM messaging products.

IBM® Cognos® Business Intelligence (BI) helps organizations meet strategic objectives and provides real value for the business by delivering the information everyone needs while also reducing the burden on IT. This IBM Redbooks® publication addresses IBM Cognos Business Intelligence V10.1. You can use this book to: - Understand core features of IBM Cognos BI V10.1 - Realize the full potential of IBM Cognos BI - Learn by example with practical scenarios This book uses a fictional business scenario to demonstrate the power of IBM Cognos BI. The book is primarily focused on the roles of Advanced Business User, Professional Report Author, Modeler, Administrator, and IT Architect.

Is it time for you to modernize your IBM® z/OS® applications to allow for access to an entire system of open source and Linux on IBM Z® workloads? Is co-location of these workloads on the z/OS platform with no porting requirements of value to you? Your open source or Linux on IBM Z software can benefit from being co-located and managed inside a z/OS

environment; leveraging z/OS quality of service for optimized business continuity. Your software can be integrated with and can help complement existing z/OS workloads and environments. If your software can communicate with z/OS and external components by using TCP/IP, now is the time examine how IBM z/OS Container Extensions (IBM zCX) makes it possible to integrate Linux on Z applications with z/OS. This IBM Redbooks® publication is a follow-on to Getting started with z/OS Container Extensions and Docker, SG24-8457, which provides some interesting use cases for zCX. We start with a brief overview of IBM zCX. In Part 1, "Integration" on page 9, we demonstrate use cases that integrate with zCX. In Part 2, "DevOps in zCX" on page 165, we describe how organizations can benefit from running a DevOps flow in zCX and we describe the set up of necessary components. Finally, in Part 3, "Monitoring and managing zCX systems" on page 229, we discuss IBM Service Management Unite Automation, a free-of-charge customizable dashboard interface and an important discussion of creating the suitable container restart policy.

In order to remain competitive in today's world, companies need to be able to integrate internally and externally by connecting sensors, customers and partners with the information in their systems of record. In short, they need to integrate with everything. This IBM® Redbooks® publication describes how IBM Application Integration Suite and IBM

Messaging portfolio can be used to satisfy the needs of core hybrid integration use cases, accelerating companies in their digital transformation journey. All concepts are explained within the context of these use cases: Joining the API economy Improving productivity Refactoring for innovation The target audience for this book is cloud and integration architects and specialists who are implementing hybrid integration solutions.

- This is the latest practice test to pass the C9530-001 IBM Integration Bus v10.0 Solution Development Exam. - It contains 122 Questions and Answers. - All the questions are 100% valid and stable. - You can reply on this practice test to pass the exam with a good mark and in the first attempt.

IBM® MessageSight is an appliance-based messaging server that is optimized to address the massive scale requirements of machine-to-machine (m2m) and mobile user scenarios. IBM MessageSight makes it easy to connect mobile customers to your existing messaging enterprise system, enabling a substantial number of remote clients to be concurrently connected. The MQTT protocol is a lightweight messaging protocol that uses publish/subscribe architecture to deliver messages over low bandwidth or unreliable networks. A publish/subscribe architecture works well for HTML5, native, and hybrid mobile applications by removing the wait time of a request/response model. This creates a better, richer user experience. The MQTT protocol is simple, which results in a client library with a low footprint. MQTT was proposed as an Organization for the Advancement of Structured Information Standards (OASIS) standard. This book provides information about version 3.1 of the MQTT specification. This IBM Redbooks® publication provides information about how IBM MessageSight, in combination with MQTT, facilitates the expansion of enterprise systems to include mobile devices and m2m communications. This book

also outlines how to connect IBM MessageSight to an existing infrastructure, either through the use of IBM WebSphere® MQ connectivity or the IBM Integration Bus (formerly known as WebSphere Message Broker). This book describes IBM MessageSight product features and facilities that are relevant to technical personnel, such as system architects, to help them make informed design decisions regarding the integration of the messaging appliance into their enterprise architecture. Using a scenario-based approach, you learn how to develop a mobile application, and how to integrate IBM MessageSight with other IBM products. This publication is intended to be of use to a wide-ranging audience.

This IBM® Redbooks® publication is designed to teach university students and app developers the foundation skills that are required to develop, test, and deploy cloud-based applications on IBM Cloud. It shows the latest features of IBM Cloud for developing cloud applications, enhancing applications by using managed services, and the use of DevOps services to manage applications. This book is used as presentations guide for the IBM Skills Academy track Cloud Application Developer and as preparation material for the IBM professional certification exam IBM Certified Application Developer - Cloud Platform. The primary target audience for this course is university students in undergraduate computer science and computer engineer programs with no previous experience working in cloud environments. However, anyone new to cloud computing or IBM Cloud can also benefit from this course.

Web Mining is moving the World Wide Web toward a more useful environment in which users can quickly and easily find the information they need. Web Mining uses document content, hyperlink structure, and usage statistics to assist users in meeting their needed information. This book provides

a record of current research and practical applications in Web searching. It includes techniques that will improve the utilization of the Web by the design of Web sites, as well as the design and application of search agents. This book presents research and related applications in a manner that encourages additional work toward improving the reduction of information overflow, which is so common today in Web search results.